DOCUMENT RESUME

ED 203 723 FL 012 422

AUTHOR Cimerhanzel-Nestlerode, Sanye Ruth Mott; Cooper, James

TITLE Individualizing Instruction in College-Level Spanish: A Study of Student Achievement and Attitude.

PUB DATE 81

NOTE 29p.; Paper presented at the Annual Meeting of the Southwest Educational Research Association (Dallas, TX, 1981).

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS College Second Language Programs; Experimental Teaching; Higher Education; *Individualized Instruction; Language Research; *Language Skills; *Second Language Instruction; Spanish; Student Attitudes; *Teaching Methods

ABSTRACT

This study considers whether the outcomes for students who participated in an individualized instructional approach to language learning in intermediate college-level foreign language courses are different from the outcomes for students who participated in a lecture-recitation aproach. A two-treatment group quasi-experimental design was used. The sample consisted of 46 students enrolled in an intermediate Spanish course at the University of Houston in the fall semester of 1979. Instructor-made pre-tests and post-tests and time logs were used to collect data from both groups, and an observational checklist was used to measure the independent variable, the instructional method used. Instructor evaluations measured the overall effectiveness in both groups. Statistical findings supported the acceptance of the hypothesis that students in the individualized instruction group achieved statistically significantly better outcomes in reading, oral comprehension, and speaking, and demonstrated a better attitude toward Spanish than students in the lecture-recitation group. The findings showed that students in the individualized instruction group did not achieve statistically significantly better outcomes in writing Spanish. (Author/AMH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Samye Mott Cimerhanzel-Nestlerode
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED203723

Individualizing Instruction in College-Level Spanish: A Study of Student Achievement and Attitude

by Samye Ruth Mott Cimerhanzel-Nestlerode and James Cooper

Although many inroads have been made toward more innovative and effective means of presenting content to students of foreign languages in elementary and secondary schools, the tendency is to approach the teaching of foreign language courses at the college level in the lecture-recitation manner. At the elementary and secondary level of the educational hierarchy it is assumed that the individualized instructional approach to language learning is the best way to teach the four skills: reading, writing, listening and speaking. This assumption is supported by empirical research, research directed at teaching foreign languages in the elementary and secondary schools. Research in the field of foreign language teaching at the college level is very limited, with most of the focus on teaching English as a second language and on bilingual education.

Research indicates that students do have problems in learning foreign languages at the college level (Allen and Paquette, 1969; Carroll, 1971; Connor, 1975; and Valette, 1969). Students enter the study of foreign languages as part of the requirements for the Bachelor of Arts Degree, bringing with them certain strengths and weaknesses which are individually different. There are individual differences in the abilities to code auditory phonetic material, to recognize the grammatical functions of words in sentence context, to memorize vocabulary and verb conjugations and to "infer linguistic forms, rules and patterns from new linguistic content itself with a

FL012422

minimum of supervision or guidance" (Carroll, 1963, p. 730).

There is a need to extend the data base in the area of instructional approaches to teaching foreign language in college level courses, especially in the area of individualized approaches to language learning. Would not the college students benefit, be more successful in their course work, achieve mastery level more easily and have a better attitude toward their studies if they were allowed to proceed at their own pace through materials which were designed especially for them and which took advantage of their particular skills and differences?

The intermediate college level of foreign language study is a particular problem area because students enter this level with many different experiences; some students may have had two years or more of high school foreign language study, which traditionally is evaluated as the equivalent of first year college level; others may be transfer students from other colleges or junior colleges, and often several years have passed since some of the students have studied the foreign language. Even though the intermediate college level of foreign language learning presents many problems for foreign language educators, it is at this level that we find the least amount of research directed. It was the intent of this study to address this level of learning in making a comparison of the effects of individualized instruction and lecture-recitation approaches in college level foreign language courses on student achievement and attitude.

The study was conducted at the University of Houston in Houston, Texas in the fall of 1979. Five directional hypotheses were investigated which followed this general form: Students in an intermediate college level Spanish course who had experienced an individualized instructional

approach to learning Spanish would demonstrate a statistically significantly (1) greater ability to write Spanish, (2) greater ability to read Spanish, (3) greater ability to comprehend spoken Spanish, (4) greater ability to communicate orally in Spanish, and (5) more positive attitude toward learning Spanish than would students who had experienced a lecture-recitation approach. The sixth hypothesis was that there was no statistically significant difference in the amount of time spent in learning Spanish between the two treatment groups.

Method

Procedures

A two-treatment group quasi-experimental pre-test post-test design was used in this study. The independent variable was the instructional approach used in teaching intermediate college level Spanish: the individualized instructional approach or the lecture-recitation approach. The dependent variables were: (1) the ability to write Spanish in a grammatically correct way, (2) the ability to read and comprehend written Spanish, (3) the ability to comprehend spoken Spanish, (5) the attitude toward learning Spanish, (6) the amount of time spent in learning Spanish.

The experimental subjects were students in two classes of intermediate college level Spanish. The experiment was conducted in the natural setting of the classroom, and the experimental subjects were not assigned randomly from a common population to the two-treatment groups. Rather, the students selected the times that they wished to take their courses and were assigned, according to their requests, by computer. A coin was flipped to determine which group would receive the individualized instructional approach to learning and which group would receive the lecture-recitation approach.

Each of the two groups consisted of twenty-three students; thus the sample size was forty-six. Although no attempt was made to have equivalent matching groups, the two groups were remarkably similar in sex, modal age and marital status. All students received the treatments and remained in the course during the entire fourteen weeks of the experiment.

Due to the nature of the study, there existed potential sources of bias which, if introduced, could limit the ability to generalize from the study. Therefore, the following limitations of the study are acknowledged: that the sample size of forty-six was relatively small; that the study was done in only one university; that the sample was not randomly assigned to the two treatments; that the two courses were not taught at the same time of the day; and that the reliability and validity of several instruments used to collect data to test the hypotheses of the study had not been estimated prior to the study.

The following instruments were used in this study. 1) An observational checklist designed to measure the independent variable, the instructional approach. 2) Instructor evaluations designed to measure the overall teaching effectiveness in both classes. 3) Instructor-made pencil-and-paper pre-tests and post-tests designed to collect data needed to test Hypotheses One, Two and Three. 4) An instructor-made oral pre-test and post-test designed to collect data needed to test Hypothesis Four. 5) A Likert-type rating scale, administered on a pre-test post-test basis, designed to collect data needed to test Hypothesis Five. 6) Time Logs kept by each student documenting the time spent in actual Spanish study during the fourteen weeks of the treatment were used to collect

data needed to test Hypothesis Six. 7) A written learning style questionnaire was administered to the students experiencing the individualized instructional approach to learning Spanish and was used for diagnostic purposes to determine each student's cognitive learning style.

All instruments designed to collect data to test the six hypotheses were administered to both treatment groups. The pencil-and-paper pre-tests and the Likert-type attitude scale were administered during the second week of the fall semester of 1979, and again as post-tests during the last week of the semester. These tests were administered and scored by the instructor from an answer key prepared in advance. The oral test was administered in the second week of the fall semester of 1979, as a pre-test and during the last week of the semester as a post-test. These oral tests were recorded on tape and scored by the instructor and by another Spanish instructor. The student Time Logs were totaled at the end of the treatment period.

To insure that each treatment of the independent variable was faithful to its instructional intent, three observers attended each classroom for fifteen minutes on three different dates during the semester and recorded the behaviors they observed on the observational checklist. At the end of the experiment, students in both groups were asked to fill out an instructor and course evaluation form. The students' anonymous responses to the questions on the forms were analyzed to provide data which were used to measure instructor effectiveness in each of the two treatment groups.

Hypotheses One through Five were tested using analysis of covariance. The pre-test scores were used as a covariate in as much as adjustment for the covariate would lead to a reduction in the error term, and consequently to a more sensitive analysis. Hypothesis Six was tested using a t-test. A .05 level of significance was used as the criterion level of significance.

Instructional Treatment I, Individualized Instructional Approach

The pre-tests and the Learning Style Questionnaire were used for diagnostic purposes to determine each student's cognitive learning style, strengths and deficiencies. Students were scheduled for one-to-one conferences with the instructor to establish individual instructional objectives, to select the particular materials and activities that they would use in attempting to achieve their specific objectives. The students then proceeded through the course of study at their own pace.

The material expected to be mastered was broken up into mini-modules. There were several modules for each part of the textbook used by the other sections of intermediate Spanish. The modules were kept on file along with pre-tests, practice tests and post-tests for each module.

A room was set aside to function as a learning center. Hours were posted when the instructor or the teaching assistants would be available to disburse materials, administer and score pre-tests and post-tests over the modules and to confer with or tutor the students. A great variety of instructional materials and media was available to the students. Students in the individualized instruction group could take advantage of any of the materials and media relevant to their own instructional objectives.

Students worked their way through the modules which corresponded to the grammatical material covered in the textbook used by the other treatment group. They tested-out of some modules, achieved mastery with the first post-test on others, and had to redirect themselves through other modules by doing remedial work. They moved along at a speed that was appropriate to their needs, some students spending more time on one module than on another. The instructor acted as a resource person, a facilitator and an advisor, giving help when it was requested. Students controlled their own learning situation and helped to set their own objectives, operating within the restrictions and framework of the Spanish Department.

Instructional Treatment II, Lecture-Recitation Approach

The large group mode was the major classroom grouping. The instructor systematically covered the material in the textbook in chronological order. Most of the instruction was given in Spanish, in a lecture format, with the students reciting when called upon. There was little movement in the classroom. The students sat in their seats with their books open, following the instructor as she discussed the material in the textbook. The instructional environment was teacher-centric. Fifteen minutes of every class meeting was set aside for conversation and oral discussion over assigned outside readings. At the end of every chapter, usually every third class meeting, students took a pencil-and-paper test over the material in the chapter. They were also assigned eight compositions during the fourteen week treatment.

Results

As indicated in Table I, statistical findings did not support the acceptance of Hypothesis One. No statistically significantly greater ability to write Spanish was evidenced in the group that experienced the individualized instructional approach. Figure 1 depicts these findings.

As indicated In Tables II, III, IV and V, statistical findings supported the acceptance of Hypotheses Two, Three, Four and Five. Students who experienced the individualized instructional approach to learning Spanish demonstrated a statistically significantly greater ability to read and comprehend written Spanish, to comprehend spoken Spanish and to communicate orally in grammatically correct Spanish and demonstrated a statistically significantly more positive attitude toward learning Spanish than did the students who experienced a lecture-recitation approach to learning Spanish. Figures 2,3,4 and 5 depict these findings.

As indicated in Table VI, statistical findings supported the rejection of the null Hypothesis Six. Students who experienced the lecture-recitation approach to learning Spanish reported spending statistically significantly more time studying outside of class than did students who experienced the individualized instructional approach. Figure 6 depicts these findings.

Conclusions

It was concluded that while students at the intermediate college level of Spanish demonstrate a statistically significant improvement in their ability to write, read, comprehend oral Spanish and communicate orally in Spanish, regardless of whether they experience the lecture-

TABLE I

Pre-Test Post-Test Mean-Score Comparisons for Writing

and Analysis of Covariance of Post-Test Scores

Group	n		Mean		SD		t	p
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test		
I I	23	23	80.87	51.70	18.95	18.79	9.34	.0001 *
L R	23	23	83.52	58.30	23.36	24.29	8.39	.0001 *

Variable	N	GM	SS	df	MS	F	p
Writing	46	55.00	235.19	1	235.19	1.18	.284 *

* criterion level of significance of .05

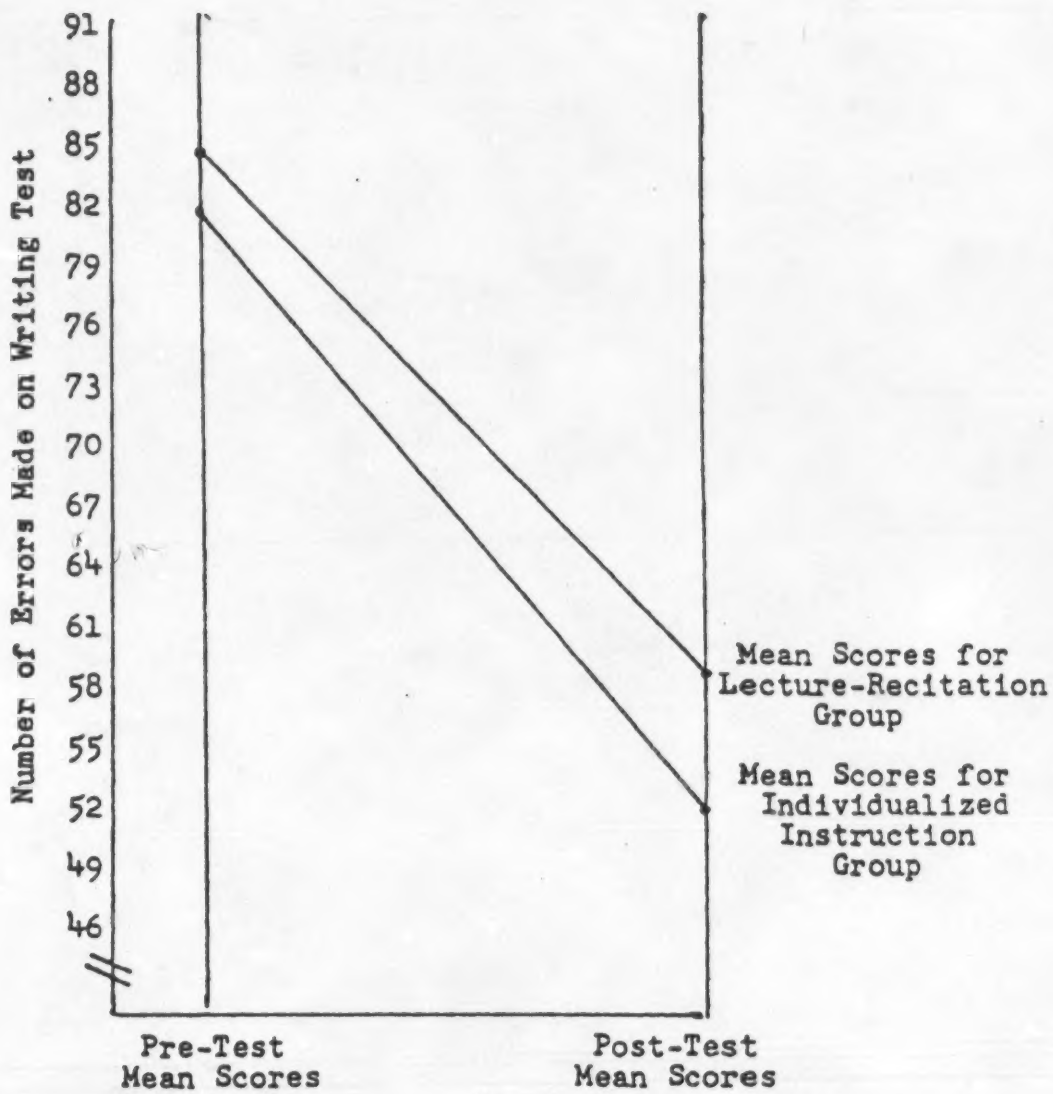

Figure 1. Comparisons of the pre-tes' and post-test mean scores of the group receiving the individualized instructional approach and of the group receiving the lecture-recitation approach

TABLE II

Pre-Test Post-Test Mean-Score Comparisons for Reading

and Analysis of Covariance of Post-Test Scores

Group	n		Mean		SD		t	p
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test		
I I	23	23	6.48	3.35	3.88	2.35	5.02	.0001*
L R	23	23	6.74	5.09	4.39	3.13	2.50	.01 *

Variable	N	GM	SS	df	MS	F	p
Reading	46	4.22	30.25	1	30.25	6.98	.011 *

* criterion level of significance of .05

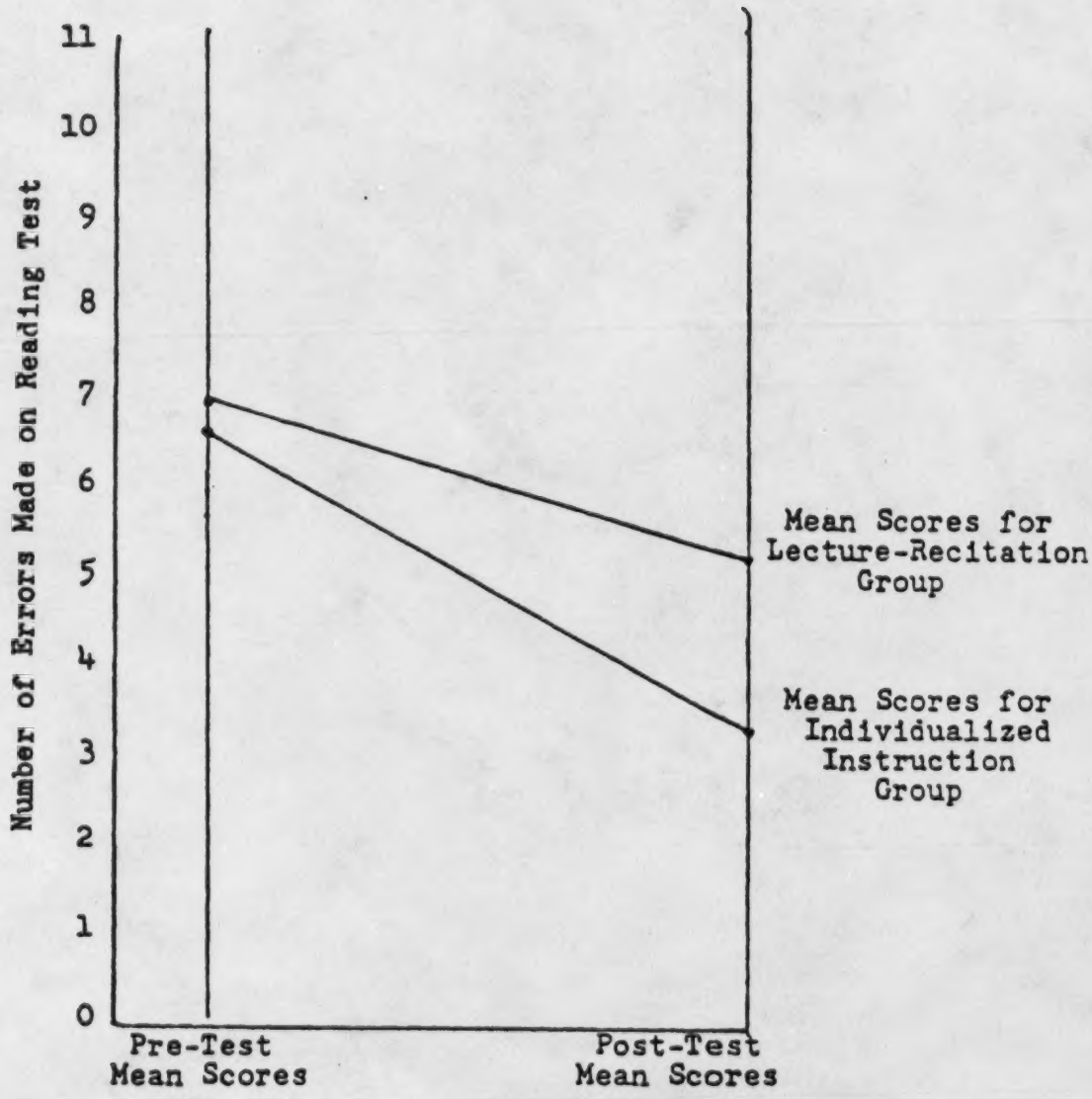

Figure 2. Comparisons of the pre-test and post-test mean scores of the group receiving the individualized instructional approach and of the group receiving the lecture-recitation approach

TABLE III

Pre-Test Post-Test Mean-Score Comparisons for Oral Comprehension and Analysis of Covariance of Post-Test Scores

Group	n		Mean		SD		t	p
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test		
I I	23	23	73.70	15.87	40.34	12.81	8.07	.0001*
L R	23	23	74.78	53.13	35.66	32.92	6.04	.0001*

Variable	N	GM	SS	df	MS	F	p
Oral Comprehension	46	34.50	15536.78	1	15536.78	48.02	.0001*

* criterion level of significance of .05

8e

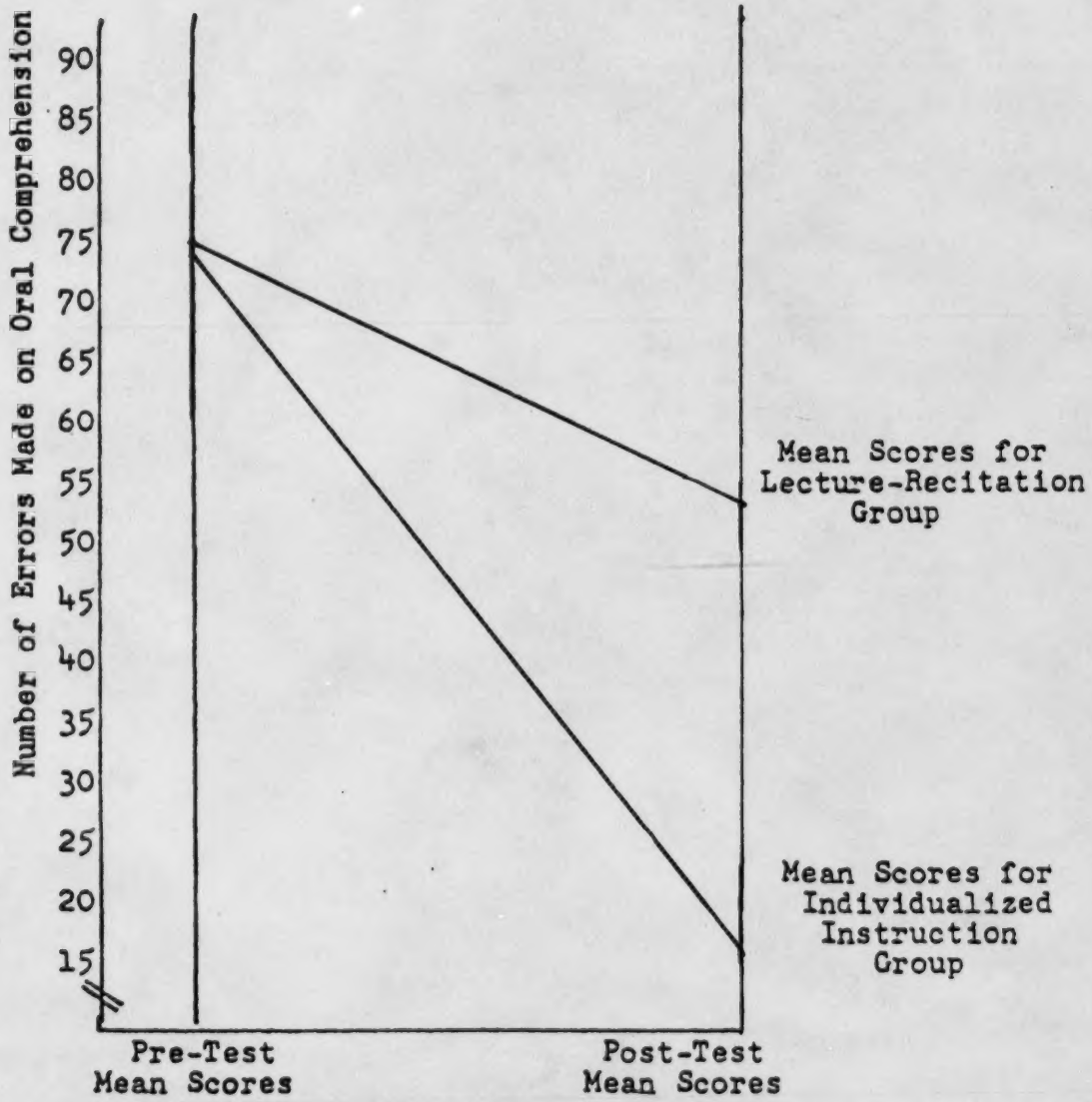

Figure 3. Comparisons of the pre-test and post-test mean scores of the group receiving the individualized instructional approach and of the group receiving the lecture-recitation approach

TABLE IV

Pre-Test Post-Test Mean-Score Comparisons for Oral Communication and Analysis of Covariance of Post-Test Scores

Group	n		Mean		SD		t	p
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test		
I I	23	23	63.04	18.83	25.93	10.89	9.56	.0001 *
L R	23	23	84.61	53.57	31.49	28.27	8.87	.0001 *

Variable	N	GM	SS	df	MS	F	p
Oral Communication	46	36.20	5320.15	1	5320.15	24.36	.0001 *

* criterion level of significance of .05

38

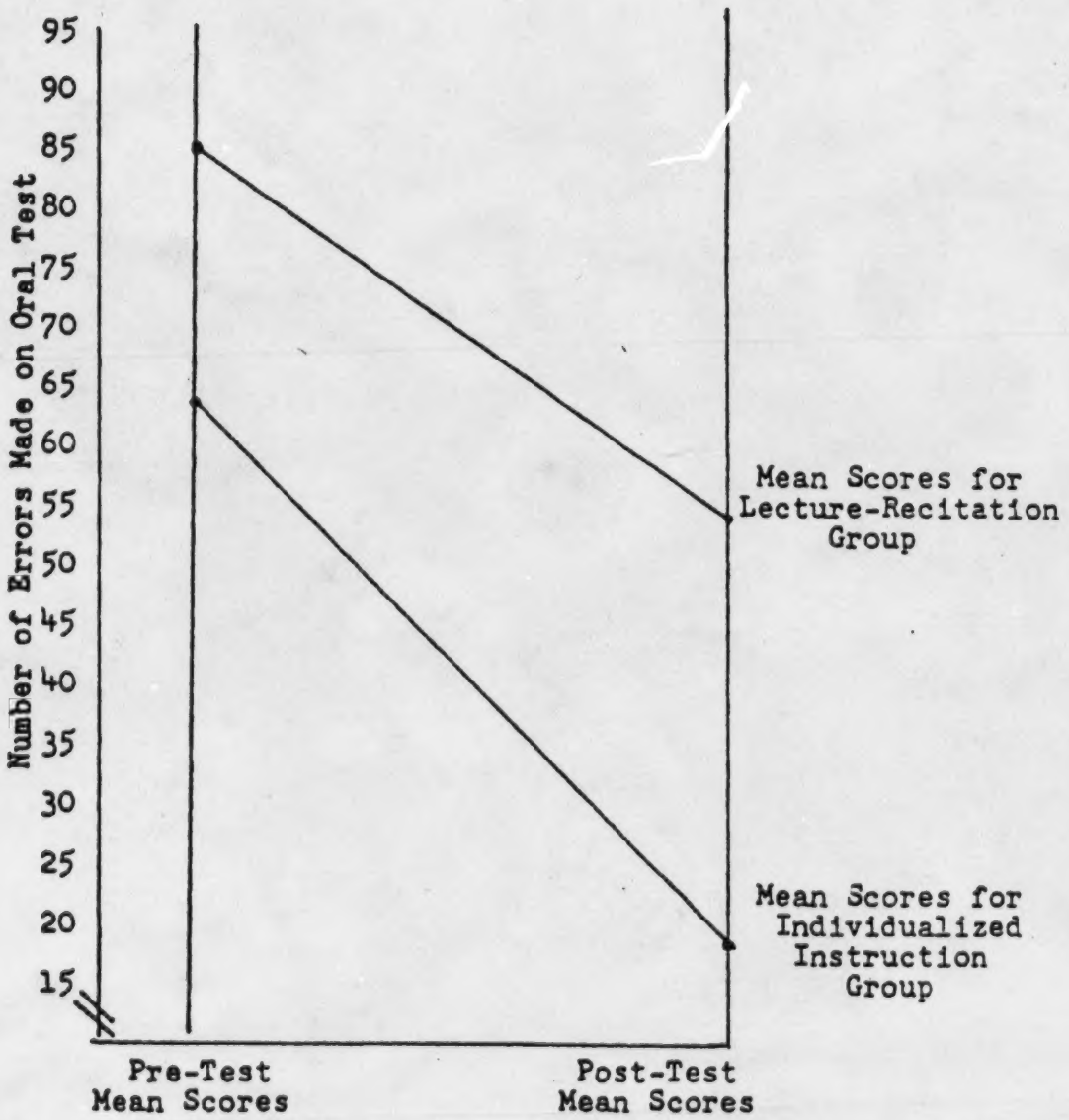

Figure 4. Comparisons of the pre-test and post-test mean scores of the group receiving the individualized instructional approach and of the group receiving the lecture-recitation approach

TABLE V

Pre-Test Post-Test Mean-Score Comparisons for Attitude

and Analysis of Covariance of Post-Test Scores

Group	n		Mean		SD		t	p
	Pre-Test	Post-Test	Pre-Test	Post-Test	Pre-Test	Post-Test		
I I	23	23	49.04	67.17	33.51	20.60	3.59	.001 *
L R	23	23	49.48	52.35	20.68	21.12	1.11	.139 *

Variable	N	GM	SS	df	MS	F	p
Attitude	46	59.76	2608.70	1	2608.70	12.30	.001 *

* criterion level of significance of .05

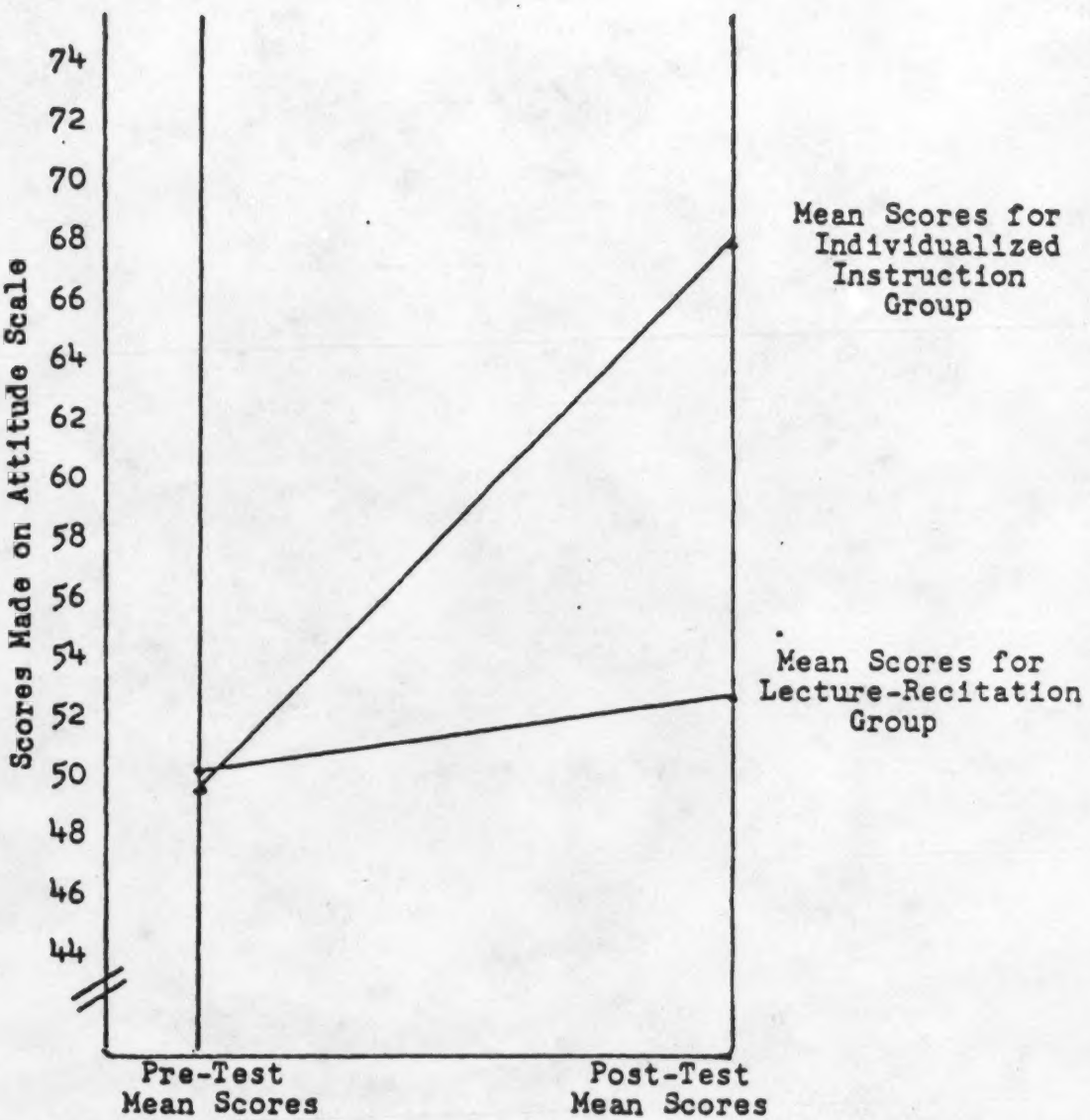

Figure 5. Comparisons of the pre-test and post-test mean scores of the group receiving the individualized instructional approach and of the group receiving the lecture-recitation approach

TABLE VI

Overall Comparison of Means on Time Spent Studying

Group	n	Mean	SD	t	p
Individualized Instruction	23	79.83	14.56	3.57	.001 *
Lecture-Recitation	23	100.74	24.03		

* criterion level of significance of .05

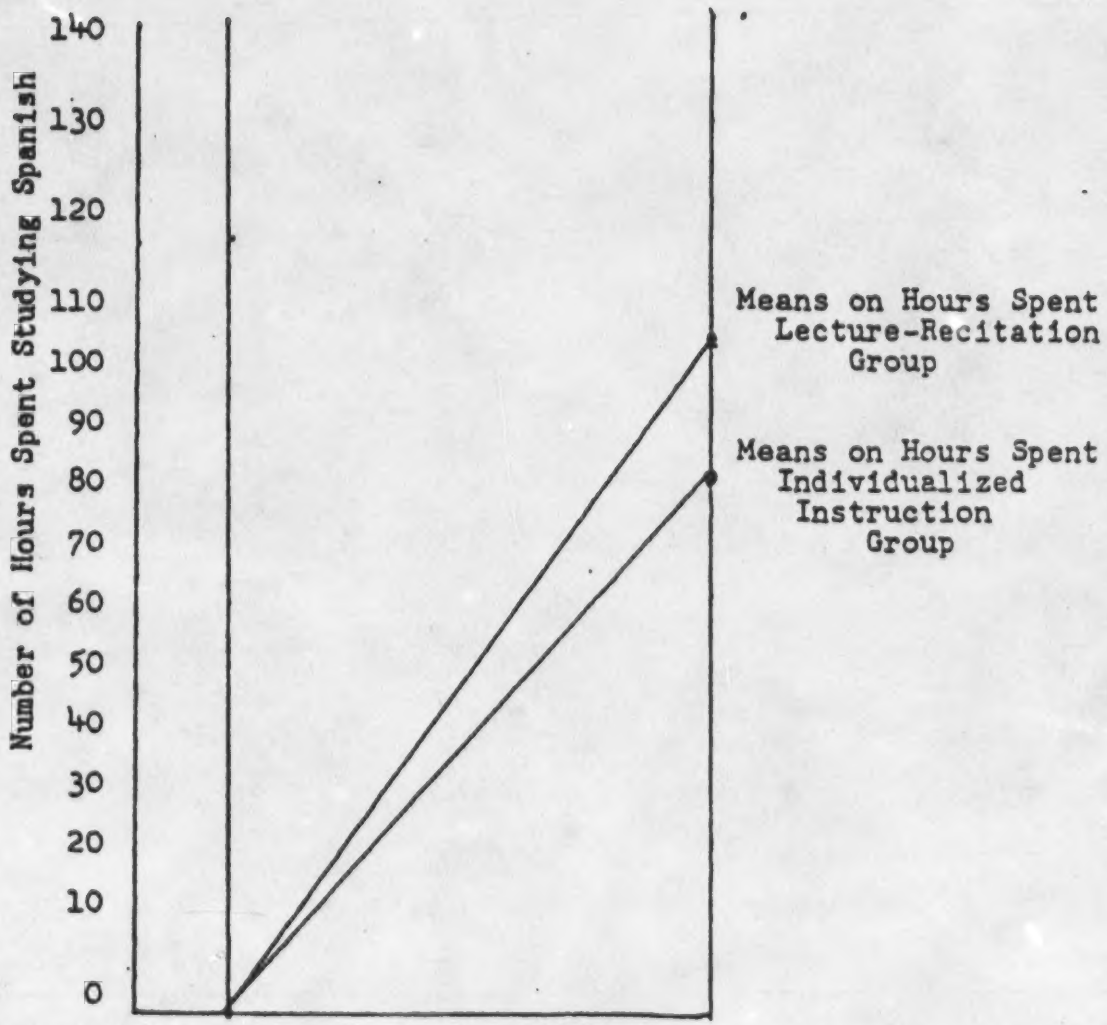

Figure 6. Comparisons of time spent studying Spanish outside of class for both treatment groups.

recitation approach or the individualized instructional approach, only the students experiencing the individualized instructional approach demonstrate a statistically significantly more positive attitude after instruction. It was also concluded that, while both methods of instruction at the intermediate college level of Spanish produce statistically significant levels of improvement in the ability to read Spanish, to comprehend spoken Spanish and to communicate orally in Spanish, the individualized instructional approach produces a statistically significantly greater level of improvement than does the lecture-recitation approach. It was further concluded that despite the fact that students in the lecture-recitation group report spending more time studying Spanish outside of class, the students in the individualized instruction group outperform the students in the lecture-recitation group in reading Spanish, comprehending spoken Spanish and communicating orally in Spanish; the students in the individualized instructional group also demonstrate a statistically significantly better attitude toward Spanish than do the students in the lecture-recitation group.

Recommendations

Since positive findings did result from this study, it is recommended that further research in this area of individualized instruction of foreign languages be conducted. It is also recommended that attention be directed toward the following areas.

1. Replication of the study should be undertaken to determine if the the findings will be supported under a different instructor.
2. A study should be undertaken in first year college level Spanish to determine if the individualized approach is effective with students who have no previous knowledge of the language.

3. A study should be undertaken using a larger sample size in order to decrease the limitations on the ability to generalize.
4. A study should be undertaken to attempt to determine why there was no statistically significant difference in the ability to write Spanish between the two groups in this study. Replication of the study and a careful examination of the findings from Hypothesis One would be a step in this direction.
5. Many questions were opened up in this study as to why students in the individualized instruction group developed such a statistically significantly more positive attitude toward Spanish. Further research in this area is recommended.
6. Since students in both groups demonstrated a statistically significant improvement in ability to write, read, comprehend and speak Spanish, research should be undertaken to determine if, taking into consideration the cost involved (both financial and in staff time), it is cost effective to adopt an individualized instructional approach to teaching foreign languages at the college-level.

Bibliography

Allen, Virginia G., and Paquette, F. André. The student's world is world: new dimensions in FLES. Bloomington: Indiana University Press, 1969.

Carroll, John B. A model of school learning. Teachers College Record, 1963, 64, 723-233.

Carroll, John B. Research on teaching foreign languages. Handbook of research on teaching. Chicago: Rand McNally and Company, 1971.

Connor, Marjorie W. Learning characteristics of able nonachievers in audiolingual foreign language classes. Dissertation Abstracts, 1975, 35, 1146A-47A (Cincinatti).

Valette, Rebecca M. The Pennsylvania project, its conclusions and its implications. Modern Language Journal, 1969, 53, 396-404.